

admirably adapted to its purpose — that of furnishing in concise form such information as the numerous visitors to the coast during the Panama Pacific Exposition, who are interested in nature, will be likely to desire. The work will however have a permanent value to the numerous tourists who are constantly visiting California, and as a general work of reference.

The several chapters are written by specialists on the subjects of which they treat and are accompanied by illustrations and by a brief bibliography from which books treating the matter in further detail may be selected.

Dr. Joseph Grinnell not only edits the volume for the Committee but also treats of 'The Vertebrate Fauna of the Pacific Coast' exclusive of the fishes, and in a few pages gives one a good idea of the diversity of forms represented, and their distribution in the several life zones and faunal areas. There are thirty other chapters on various topics, zoölogical, botanical, geological, mineralogical, etc. Dr. Grinnell's contribution has also been issued as a separate.— W. S.

Murphy on 'The Penguins of South Georgia.'¹— Several papers dealing with the results of Mr. Murphy's expedition to South Georgia have appeared in 'The Auk' and elsewhere and a number of scientific societies have been made familiar with the avifauna of the island through his lectures and admirable lantern slides. In the present paper the photographs from which many of the lantern slides were made appear as half-tone plates, while the text places on permanent record his observations on the life history of the penguins which constitute the main population of South Georgia.

The two species which are still plentiful are the "Johnny" Penguin (*Pygoscelis papua*) and the King Penguin (*Aptenodytes patachonica*), and only one other was observed by Mr. Murphy, the Ringed Penguin (*Pygoscelis antarctica*) and of it only three individuals. Later information however showed also the presence of the Macaroni Penguin (*Eudyptes chrysolophus*).

Mr. Murphy presents a very interesting account of the habits, molt, coloration, etc., of the two species which he was able to study and compares his experience with that of others.

The "Johnny" Penguin he states "has not in any degree the fearless and courageous disposition of its Antarctic congener *Pygoscelis adeliae*," and he shows further that it lacks the jumping and diving ability of that species. This he attributes to the fact that it has "a Subantarctic range and breeds on no land which has an ice-shelved coast." So that the need for such phenomenal jumping power disappears.

Mr. Murphy emphasizes the current misstatements regarding penguins. Taking for example such a work as the 'Cambridge Natural History'

¹ The Penguins of South Georgia. By Robert Cushman Murphy. Science Bull. Mus. Brooklyn Inst. Arts. and Sci., Vol. 2, No. 5, pp. 103-133. August 2, 1915.

we find it stated that (1) the flippers have highly compressed bones with no power of flexure; (2) the tongue is rudimentary; (3) they lay two coarse flavored eggs (4) the young are hatched blind; (5) the parent feeds the young by inserting its bill into that of the nestling. All of these statements Mr. Murphy found to be erroneous: the tongue is in most if not all species well developed; the eggs are from one to three in different species; the eyes of the young are open at hatching and the young inserts its bill into that of the parent when feeding not *vice versa*.

Mr. Murphy has made an important contribution to our knowledge of the Spheniscidæ which may take its place along with Levick's 'Antarctic Penguins' and other recent publications on the subject. His photographs are excellent but the printing of some of the half tones has been very poorly done.—W. S.

Chapman on New Birds from Central and South America.¹—

Dr. Chapman in continuing his studies of the extensive Colombian collections obtained by himself and his collectors, finds additional new forms both in Colombia and in neighboring countries, which he proceeds to name in the present paper. *Odontophorus guianensis panamensis* (p. 363) is described from Panama and the relationship of the other subspecies discussed. The races of *Leptotila rufaxilla* are considered, of which two are described as new, *L. r. hellmayri* (p. 368), Trinidad; and *L. r. pallidipectus* (p. 369) Buena Vista, Colombia. A partial revision of the South American Sparrow Hawks results in the recognition of seven races of which *Cerchneis sparverius caucæ* (p. 375) Cauca Valley, Colombia, and *C. s. fernandensis* (p. 379) Island of Juan Fernandez, off Chile; are new.

The following additional new forms are proposed: *Asio flammeus bogotensis* (p. 370), Bogota; *Rhynchortyx cinctus australis* (p. 365), Barba-coas, Col.; *Columba subrinacea peninsularis* (p. 366), Cristobal Colon, Ven.; *Chamepelia rufipennis caucæ* (p. 367), Cauca Valley; *Pyrhura melanura pacifica* (p. 382), Buenavista Nariño, Col.; *Psittacula conspicillata caucæ* (p. 383), Cauca Valley, *Curucujus massena australis* (p. 384), Barba-coas, Col.; *Andigena nigrirostris occidentalis* (p. 385), San Antonio above Cali, Col.; *Chloronerpes rubiginosus buenavistæ* (p. 386), Buena Vista, Col.; *Atlapetes gutturalis brunnescens* (p. 387), Boquete, Chiriqui.—W. S.

Cory on New South American Birds.²—Mr. Cory's continued study of the South American collections received at the Field Museum results in the description of the following new forms: *Threnetes leucurus rufigastra*

¹ Descriptions of Proposed New Birds from Central and South America. By Frank M. Chapman. Bull. Amer. Mus. Nat. Hist., XXXIV, pp. 363-388. May 27, 1915.

² Notes on South American Birds, with Descriptions of New Subspecies. By Charles B. Cory. Field Museum of Natural History Publication 183. Ornithological Series, I, No. 9, pp. 303-335. August 7, 1915.